ABSTRACT OF THE DISCLOSURE

A system is provided for substantially continuously monitoring an electromagnetic intensity of short bursts of electromagnetic waves (E-waves) having frequencies within a broad frequency range. The system includes at least one antenna capable of detecting one or more bursts of E-waves and converting the bursts into radio frequency (RF) signals having an energy level correlated to the intensities of the E-waves. The system additionally includes at least one broadband equalizer that normalizes the energy levels of RF signals across the broad range of frequencies and at least one amplifier that amplifies the energy levels of the RF signals output by the broadband equalizer. The system further includes at least one RF peak power sensor for measuring the energy levels of the RF signals output from the amplifier and determining the peak power level of at least one peak RF signal that has the highest energy level. Further yet, the system includes at least one power meter that converts the peak power level of the peak RF signal to power units and a computer based device that utilizes the power units output by the peak power measurement subsystem to determine the strength of the E-wave correlated with the peak RF signal.